NWS FORM E-5 (11-88) (PRES. BY WSOM E-41)	U.S. DEPARTMENT OF COMMERCE  NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA)  WFO Jackson, Mississippi
,	EPORT OF RIVER AND FLOOD CONDITIONS	REPORT FOR: MONTH YEAR November 2002
TO:	Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283	SIGNATURE Alan Gerard, MIC In Charge of HSA  DATE December 16th , 2002

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41)

November 2002 was vastly different from last November. The first half of the month was wet while the remainder of the month was much drier. Last November, we were experiencing near drought conditions during the first 3 weeks of the month and extremely wet conditions over the final week, especially over the Yazoo River System.

The most significant rainfall occurred during the first week of the month. A series of gulf low pressure systems moved along a stationary boundary that lay across southern Louisiana from the  $3^{\rm rd}$  to the  $5^{\rm th}$ . Some of the heaviest 1 day rainfall totals occurred between the  $3^{\rm rd}$  and the  $5^{\rm th}$ . The heaviest rainfall amounts occurred at Larto Lake, LA 4.10 inches  $(4^{\rm th})$ . Other heavy amounts: 3.30 inches at Red River Lock #1, LA  $(4^{\rm th})$ ; 3.25 inches at Jonesville Lock & dam, LA  $(4^{\rm th})$ ; 3.10 inches at Winnsboro, LA  $(5^{\rm th})$ ; 2.90 inches at Rayville, LA  $(5^{\rm th})$ .

For the remainder of the month, a series of cold fronts moved across the HSA. From the  $11^{\rm th}$  to  $13^{\rm th}$ , a cold front and an associated gulf low moved through the area producing rainfall from less than .25 inches to near 1.50 inches over southern sections. A cold front also moved through the area on the  $15^{\rm th}$  and  $16^{\rm th}$ . Rainfall amounts were around 1 inch or less with the heaviest rainfall in south and southeast sections. Another cold front pushed across the area from the  $18^{\rm th}$  to the  $20^{\rm th}$  producing .50 inches or less in southeast sections of Mississippi. Near the end of the month a fast moving cold front pushed through the area, rainfall amounts were scattered throughout the HSA with amounts .25 inches or less.

At the beginning of the month, much above normal soil moisture conditions were observed over most all of the HSA. Even with below normal rainfall over many sections of the HSA during the month, soil moisture conditions remain abnormally high. Minor river flooding was observed early in the month on the upper and lower Pearl River, Yalobusha, and the upper and middle Big Black. Flood potential for HSA rivers should remain high over the next several months. See the November E-3 report for information on flood crests. Rainfall for the month of November:

RIVER BASIN	RAINFALL	DEPARTURE FROM NORMS	
Southeast Arkansas (Chicot & Ashley counties)	4.00 to 5.00 inches	Below normal over Ashley and near normal over Chicot.	
Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	4.00 to 5.00 inches northern sections	Below to near normal.	
, and the second	4.50 to 5.75 inches central sections	Near normal to above normal.	
	5.50 to 7.25 inches southern section	Near normal to much above normal.	
Lower Yazoo	3.50 to 5.00 inches	Below normal.	
Big Black	5.50 to 7.50 inches upper	Above to much above normal.	
	4.00 to 4.50 inches lower and middle sections	Below to near normal.	
Homochitto/ Bayou Pierre	4.00 to 6.50 inches	Above normal over Bayou Pierre to below normal over the Homochitto.	
Pearl (abv Jackson)	2.25 to 3.50 inches	Below to much below normal.	
Pearl (Blo Jackson)	3.00 to 5.00 inches	Below to near normal.	
Pascagoula	4.00 to 5.25 inches over the Leaf basin.	Below to near normal.	
	4.00 to 4.50 inches over the Black Creek basin.	Below normal.	
	3.25 to 4.00 inches over the Chickasawhay	Below normal.	
Tombigbee tributaries in the JAN HSA	2.00 to 6.00 inches	Above normal in northeast sections of the HSA to below normal over east	

central tributaries.

The heaviest rainfall amounts in the HSA for the month were: 7.73 inches at Larto Lake, LA; 7.53 inches at Ackerman, MS; 7.05 inches at Oakley Experimental Station in Hinds County, MS; 7.04 inches at Jonesville L/D, LA; 6.72 inches at Clayton, LA; 6.21 inches at Tibbee, MS; 6.19 inches at Red River Lock & Dam, LA; 6.15 inches at Pickens, MS.

Here at the Jackson WFO, the November monthly rainfall was 4.17 inches, which was 0.87 inches above normal. Ending November 30th, we have had 62.12 inches of rain thus far this year, which is 11.51 inches above normal. The Fall of 2002 in Jackson, MS was the  $2^{nd}$  wettest on record with 20.97 inches. Since September 1st, only the Fall of 1906 was wetter with 23.31 inches.

At the Meridian Airport, the November monthly rainfall was 3.34 inches, which was 1.61 inches below normal. Ending November 30th, Meridian has had 50.01 inches of rain thus far this year, which is 3.33 inches below normal.

The Mississippi River from Arkansas City, AR to Natchez, MS had 2 peaks during the month with the highest occurring during the last 11 days of the month. After the second peak, the river continued to fall during the remainder of the month. Stages were below seasonal norms for the first and last week of the month at Arkansas City and Greenville while above season norms were noted at Vicksburg and Natchez for the entire month. The provisional high and low stages for November are listed below:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	14.81	11/19	5.20	11/03
Greenville, MS	26.24	11/20	16.29	11/03
Vicksburg, MS	20.03	11/21	10.24	11/04
Natchez, MS	27.20	11/22	19.30	11/04

Total Flood Warning products issued: 9
Total Flood Statement products issued: 98
Daily Rainfall Products (RRA'S) issued 30
Daily River Forecast Products (RVS'S) issued 30

Daily River Stage products (RVA'S) issued 30

## Marty V. Pope Service Hydrologist

Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District

USGS Ruston District

USCE Mobile District

USCE Vicksburg District

USCE Mississippi Valley Division

USGS Mississippi District

SRH Climate, Weather and Water Division

**LMRFC** 

Pearl River Valley Water Supply District

Hydrologic Information Center

Southern Region Climate Center

Pat Harrison Waterway District